Release Information

These Release Notes document the evolution of the product Predict Application Control (PAC) and its semi-autonomous part Predict Application Audit (PAA) from release 2.3.1 into release 2.3.2.

- The main objective of this release is to introduce an enhanced COMPARE interface. It also serves to consolidate all released PAC 2.3.1 fixes.
- PAC always has priority over Predict when using a shared coordinator FDIC file. If a Predict load / import operation can run parallel to a PAC Load Predict Objects operations at your site, you are strongly recommended to use different coordinator FDIC files for Predict and PAC. You must configure your PAC coordinator FDIC file manually (no SMA support).

This document is organized in the following topics:

- Prerequisites
- Installation
- Changes and Enhancements
- Corrections
- Documentation
- Other Useful Information

Prerequisites

Required Products

The following products must be installed before you install PAC / PAA 2.3.2.

Natural

- Natural for Mainframes version 3.1.*n*.

Note:
If you are using Natural for Mainframes version 3.1.3 or 3.1.4 please ensure that the following fixes are applied:

Zap Correction	NA44135
Zap Correction	NA44136
Natural IUPD	NA314I6

Adabas

- Adabas version 7.

  The following Adabas parameter should be set during the installation of PAC/PAA 2.3.2:

  `NISNHQ=200` (or greater)

Predict

- Predict version 4.1.

  For Predict 4.1, fix PD412J2 must be applied. This fix is supplied on the installation tape in file PRD412.I0J2

- Predict version 4.2.

  For Predict 4.2, fix PD421I5 must be applied. This fix is supplied on the installation tape in file PRD421.I0I5

- For Predict Xref 1.1.1, fix PX111I3 must be applied. This fix is supplied on the installation tape in file PXR111.I0I3.

Predict Compatibility:

Since PAC and PAA provide change management for both Predict and Natural objects, they must be compatible with new versions of Predict. Thus, the structure of the PAC PCF system file must match the version of the Predict installed.

The PAC PCF system files provided on the PAC / PAA 2.3 installation tape is compatible with Predict 4.1 and Predict 4.2. The PAC PCF system file must not be shared between different versions of Predict.

For this version of Predict ...	**... use this dataset**
Predict 4.1	PAC23*n*SYS2
Predict 4.2	PAC23*n*SYS3

Other Related Software AG Products

These products are not in any particular order, but if used with PAC/PAA 2.3.2, the following prerequisites must be met:

Natural Security

- Natural Security for Mainframes version 3.1.*n*.
- Natural Security is required to restrict users in the PAA system from performing administration functions and from initiating loads.
- Natural Security is required to access User Exit subprograms from libraries other than SYSPAC and SYSPAA.

Natural for DB2

- Natural for DB2 version 3.1.*n*.

Predict Case

- Predict Case version 2.5.

Entire System Server

- Entire System Server version 3.1.*n* is required to support foreign objects.· Set the following ESY startup parameter:

  `IUBL=12000` (recommended)

You may wish to fine-tune this parameter with the parameters in module NATPNIPS, depending on the requirements of your installation.

Natural Construct

Natural Construct 4.3.1

Supported TP Monitors

- OS/390 environment - Com-plete, CICS, TSO, and IMS/DC TP-monitors.
- VSE environment - Com-plete and CICS TP-monitors.
- BS2000/OSD environment - UTM and TIAM TP-monitors.
- CMS environment - CMS TP-monitor.

Installation

The installation of Predict Application Control 2.3.2 follows the same guidelines outlined in the PAC 2.3.1 Installation documentation. The various different upgrade procedures / routes are identical.

The only upgrade procedure / route not mentioned in the PAC 2.3.1 Installation documentation is that from PAC 2.3.1 to PAC 2.3.2.

To upgrade from PAC 2.3.1 to PAC 2.3.2:

1. Load PAC / PAA System Programs - SMA Reference: Job I061, Step 1700

   The PAC/PAA system programs are contained in the dataset PAC23n.INPL and are loaded to your Natural FNAT and FUSER system files using the Natural utility INPL.

2. Load PAC/PAA Error Message Texts - SMA Reference: Job I061, Step 1701

   The PAC/PAA error texts are contained in the dataset PAC23n.ERRN and are loaded to your Natural system file (FNAT) with the Natural utility ERRLODUS.

3. Convert PAC control records - SMA Reference: Job I200, Step 1720

   The PAC ACF and PCF version control records are converted from version 2.3.1. to the 2.3.2 format. Make sure that the logical file 210 points to your ACF and the logical file 211 to your PCF. If not, restart Natural, specifying 'LFILE=(210,DBID,FNR)', 'LFILE=(211,DBID,FNR)'. Execute module CONVERT from library SYSPACA, ensure that MENU is not defined as the startup transaction for library SYSPACA.

4. Convert PAA control records - SMA Reference: Job I200, Step 1715

   The PAA version control records are converted from version 2.3.1 to the 2.3.2 format. Make sure that the logical file 178 points to your FPAA. If not, restart Natural, specifying 'LFILE=(178,DBID,FNR)'. Execute module CONVERT from library SYSPAAA, ensure that MENU is not defined as the startup transaction for library SYSPAAA. This module does access your production FUSER / FUSERS in order to verify and/or

update the PAA control records.

Changes and Enhancements

PAC 2.3.2 has introduced a new interface for the Compare Utility.

New Interface for the Compare Utility

With this PAC Version the Compare utility has been enhanced with a new user interface which provides the fully functional PAC Compare engine.

Depending on the environment from which the Compare utility is invoked, you access the relevant menu in either

- Natural mode

  In Natural mode you can compare individual objects and lists of objects outside the control of a PAC environment.

  The Compare utility interface for Natural mode is invoked, if you execute the COMPARE command from any Natural library other than SYSPAC or SYSPAA. You can use the Compare utility for any Natural library or Natural object you have access to.

- PAA mode

  In PAA mode you can compare objects and lists of objects under the control of the PAA system.

  The Compare utility interface for PAA mode is invoked, if you execute the COMPARE command from the library SYSPAA or choose option C from the PAA main menu. You can use the Compare utility for PAA-controlled objects which reside on the PAA system file.

- PAC mode

  In PAC mode you can compare objects and lists of objects under the control of the PAC system.

  The Compare utility interface for PAC mode is invoked, if you execute the COMPARE command from the library SYSPAC or using option C in the PAC main menu. You can use the Compare utility for PAC-controlled objects which reside on the PAC system file.

For a detailed description, please refer to the section Compare Utility in the PAC Reference Documentation.

Corrections

Below is a list of all released PAC 2.3.1 fixes indicating the PAC 2.3.1 fix number, the date of the fix, a short description of the reported problem as well as the Software AG internal problem number.

Fix Number	Date of Fix	Description	Problem Number
E001	19/02/2002	Correct a spelling mistake in an error message E7360.	220630
001		This fix was not released.	
002	02/12/2001	Correct the parameters used in a call of PACEX019.	220492
003		This fix was not released.	
004	02/12/2001	Correct several map displays.	220502

Fix Number	Date of Fix	Description	Problem Number
005		This fix was not released.	
006	02/12/2001	Enable the Compare Utility to work on FDIC's of version 4.2.	220505
007	06/12/2001	Correctly fill the Object field of a Display Object Status screen.	220506
008	18/12/2001	At migration list expansion, when listing files linked to a database, do not miss the second and subsequent Predict records carrying the list of the files.	220546
009	09/01/2002	1. In the PCF reload step of a Predict migration do not omit to process the password supplied for the PCF with MIGEX003. 2. At a Predict migration from a development deployment reload all non-Adabas databases of the compartment whose types are such that make the databases possibly necessary for the generation of DDM's for the files being migrated.	220550
010	09/01/2002	Do not omit to set logical file 219 before expanding the migration list of an migration from a development or maintenance event.	220552
011	09/01/2002	Prevent an occasional NAT1316 at the generation of a migration event audit report line, listing the applymods that are switched on.	220553
012	17/01/2002	Correctly check the PCF's Predict version at the conversion of PAC to versions 2.2 and 2.3.	220557
013	17/01/2002	Use STACK TOP DATA FORMATTED instead of STACK TOP DATA wherever the contents of a participating field are not required to be delimiter-free.	220558
014	17/01/2002	Do not refer to foreign locations in the Additional Options windows for Predict applications.	217714
015		This fix was not released.	
016	29/01/2002	1. Change or remove more texts displayed by PAC/PAA 2.3 and referring to PAC/PAA 2.2. 2. Do not, when migrating, truncate source lines longer than 94 bytes. 3. Do not run into a NAT3144 when applying a PAA FTT to many objects.	220563
017	04/03/2002	Correct a mistake resulting in an OR FTT not being applied if it has no database entry.	221252
018	04/03/2002	At a Predict migration reload, ensure that all databases linked to a file are correctly loaded. Correctly load a database required for DDM generation of an Adabas user file.	221253

Fix Number	Date of Fix	Description	Problem Number
019	04/03/2002	At a retirement from a maintenance deployment call PACEX007 early enough to make it possible to use it to exclude some objects from processing. Do not call PACEX007 at a migration that is neither from nor to a maintenance deployment.	221251
020	08/03/2002	Correctly put zeros, not spaces, into the database and file number portions of migrated XREF records.	221276
021	13/03/2002	Use 'FILERELATION' instead of 'RELATIONSHIP' when generating a Predict UNLOAD command.	221606
I1	25/03/2002	PAC 2.3.1 cumalative fix 001 released, includes all released fixes between 001 and 021.	220628
022	18/03/2002	Do not omit to pass the RELEASE command at the event unlocking with back-out step.	221690
023		This fix was not released.	
024	22/03/2002	Ensure the CATALL counter displays the correct number of objects.	222068
025	27/03/2002	Make SCANOBJ disregard several initial characters of a source line of a data area.	222369
026		This fix was not released.	
027	15/04/2002	Do not try to use PAC/PAA error messages in languages with numbers greater than 9; use the English messages; thus prevent a NAT1316 in PACNMSG.	222366
028		This fix was not released.	
029	23/04/2002	Enable migration event list generation to work with Predict 4.1 created SETS.	222061
030	14/05/2002	Correctly process DB2 DDMs generated in the PCF with Truncated creator on. At PAC 2.1 to 2.2 conversion create suitable object records for DB2 DDMs generated in the PCF with Truncate creator on.	223822

Documentation

With this version of PAC the documentation is delivered in HTML format. Available in printed format are the Installation Manual (Version 2.3.1) and the Release Notes (Versions 2.3.1 and 2.3.2).

The following sections have been updated:

- Compare Utility

  The former chapter 3 of the PAC Reference Manual has been re-worked to incorporate the interface changes for the new Compare Utility.

- Documentation errors with APINSELE have been corrected.

- Migration Utility

  (Documentation Change only) The MIGLOAD documentation in the PAC Reference documentation has been incorrect for some time. It has now been correctly documented and reflects the correct functionality of the delivered software.

Other Useful Information

- PAC / PAA Conversion Guidelines
- Maintenance End for PAC 2.2.2
- Application of Released PAC Fixes
- FTT Changes Since PAC 2.3.1

PAC / PAA Conversion Guidelines

There have been a number of questions raised recently about the way in which PAC / PAA conversion testing should be carried out. There are various ways to address this complex issue, and we will now attempt to provide a guideline based on actual customer conversion experiences.

The most successful conversion testing has been carried out in complete replicated systems i.e. the PAC / PAA installed system is copied to another set of system files and databases. To enable that this is carried out properly all system files involved namely FNAT, FDIC, FUSER ACF, PCF and PAA need to be copied to another database for testing.

At this point it is important that the PAC and PAA system files be renumbered, as they will be residing on a different database and possibly having a different file number.

The PAC ADJUST function is straightforward and should be carried out first. The PAA ADJUST function is slightly more complex and should be carried out firstly on the FUSER, FSEC, FDIC and FNAT. To avoid NAT3148 errors during PAA ADJUST - because one or more FUSER, FNAT, etc. were not adjusted - it is wise to make a list of all PAA locations before moving FPAA file. The list then could be used to run PAA ADJUST correctly. This process may have to be carried out several times as there may be multiple copies of these files in use by a single PAA, lastly then the FPAA file should be adjusted, as this will update the control records of all libraries which are controlled by this FPAA.

It is important to include any customization in the testing phase as APIs and user exits have been changed between the various versions.

When running PAC conversion installation (CONVERT) then the current assigned PAA system file (lfile 178) is put into the application production status links. If there is no PAA system file specified, then (0/0) is put into the application production status links. Both the PAC as well as the PAA CONVERT programs now detect what version of PAC / PAA you are running and do their conversions based on this information.

It is advised that when converting the PCF data using the Predict conversion mechanism, that the INPLACE conversion method be used and not the UNLOAD/LOAD method.

As most customers will only install the current version considerable time after release date, there may or may not be a number of available new fixes.

Please ensure that before any conversion is carried out, that all available fixes for the version in question are applied.

Maintenance End for PAC 2.2.2

Software AG's maintenance of Predict Application Control 2.2.2 will end on 31st August 2002. Software AG strongly recommends that you migrate to Predict Application Control Version 2.3.2 as soon as possible.

Application of Released PAC Fixes

PAC is no longer delivered in two seperate sections, namely PAC and PAA. This also applies to fixes that are delivered. There is no distinction made between a PAC fix and a PAA fix. Therefore please ensure that all fixes installed at your site are installed into all FNATs that are running PAC or PAA. Failure to do so may cause either the PAC or PAA systems to become unstable.

FTT Changes Since PAC 2.3.1

It is now possible to define and keep FTTs in the PAA system. These FTTs for migrations to production need to replace any existing PAC FTT's that involve production type statuses, they can, once defined be linked to individual PAA locations. The PAC FTT functionality is still available in the PAC system.

